



Division of Agricultural Sciences
UNIVERSITY OF CALIFORNIA

SIMPLIFIED SEWING

ETHELWYN DODSON

FRANCES REIS QUINN

CALIFORNIA AGRICULTURAL
Experiment Station
Extension Service

MANUAL 11

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COLLEGE OF AGRICULTURE

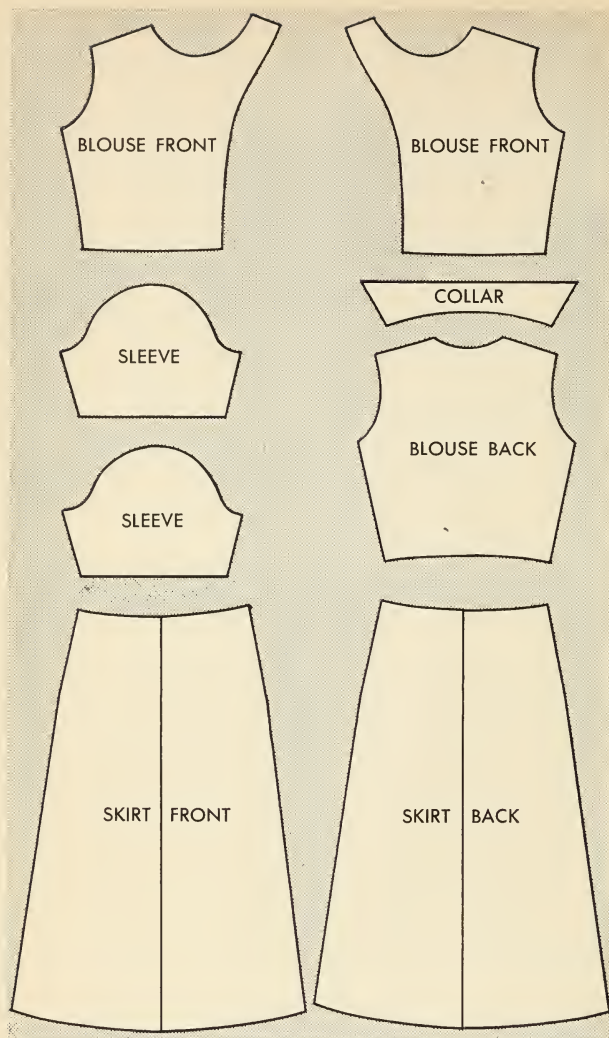
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CONTENTS

	Page
An organized method for making a garment	1
Use the unit method	1
Choose cloth that is easy to handle	1
Choose pattern size range	2
Lay the pattern on the fabric	3
Cut and mark the garment	8
Making a garment by the unit method	9
Sewing techniques	13
Necklines	13
Sleeves	16
Hems	17
Plackets	18
Piped buttonholes	18
Darts	19
Machine gathering	20
Seams	20
Woven plaids	21
Stripes	23
Patterned fabrics	23
Tips on handling fabrics	23
Fabrics made from natural fibers	23
Fabrics of man-made fibers	24



Think of each part of your pattern as a unit. Illustrated here are the units of a simple dress.

Making an attractive garment of good workmanship is possible for either a beginner or an experienced sewer.

The directions given in this manual can be adapted to the making of any garment, whether for a man, woman, or child.

The organized type of sewing described in this manual is the unit method. Each part of a garment is completed before the parts are put together. The easy-to-follow steps will save you time and effort.

The sewing techniques will help you achieve good workmanship.

Tips on using fabrics other than cotton will be of help when you are ready to extend your sewing experience.

THE AUTHORS:

Ethelwyn Dodson and Frances Reis Quinn are Clothing Specialists, Agricultural Extension, Berkeley.

SIMPLIFIED SEWING

ETHELWYN DODSON

FRANCES REIS QUINN

AN ORGANIZED METHOD FOR MAKING A GARMENT

Use the unit method

The unit method of sewing is a way to make a garment in easy-to-follow steps. Each part of the garment is a unit. For example, the units of a dress are the blouse back and front, the collar, the sleeves, and the skirt back and front. It is easier to sew on one flat part than on several parts that have been joined. Complete whatever sewing can be done on each unit before it is joined to other units.

Choose cloth that is easy to handle

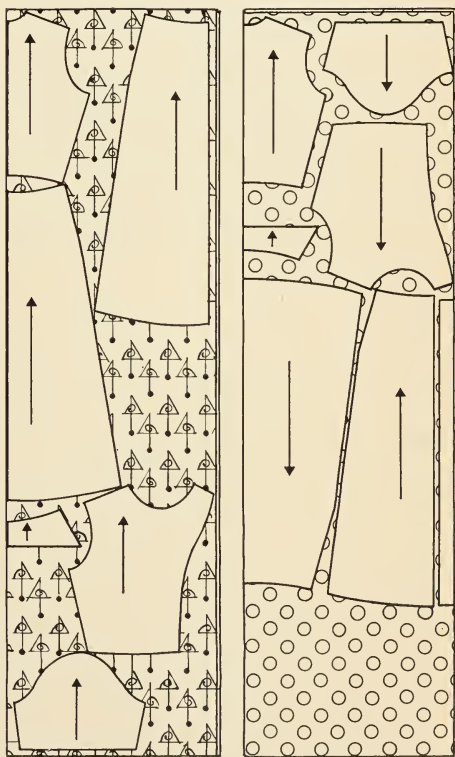
Choose easy-to-handle fabrics when practicing quick methods in sewing. Cotton cloth is easy to use.

Vat-dyed cottons are the most permanent—least likely to run or fade. Cottons labeled for controlled shrinkage are ready to use. If the cotton is not shrunk, shrink it before cutting.

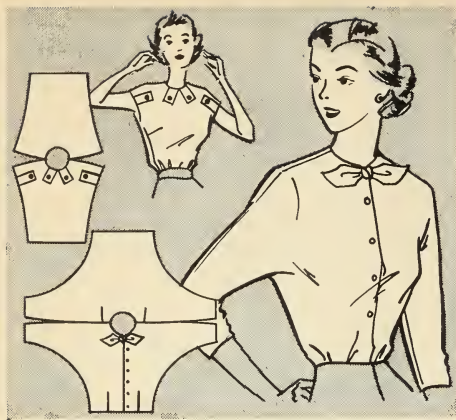
To shrink cotton material:

1. Without unfolding it, soak the cloth in warm water until it is completely wet.
2. Drain off water. Do not wring cloth.
3. Straighten and pull cloth into shape while it is wet.
4. Let cloth drip dry until damp enough to iron. Press straight with the grain.

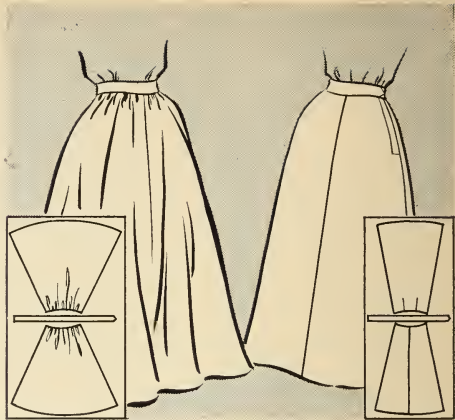
Suitable for your first garment are printed or solid-color cottons, such as percale, chambray, pique, poplin, broadcloth, denim, or suiting. Firmly woven rayon may also be chosen. Spun rayons and washable, linen-like weaves that tear with a short fringe and do not ravel badly are best.



You save material by choosing a print with no up and down (right), rather than one that must go in one direction only (left).



Two simple but attractive blouses have only two pattern pieces each, require little sewing.



Gathered skirt (left) and straight skirt (right) are easy to make.

Avoid fabrics that slow up sewing time

Plaids, stripes, and large prints take time to center and match.

Avoid sheer fabrics because they require extra seam finishing.

Napped fabrics like corduroy and velveteen must be cut so that the nap lies in one direction. Prints with figures lying in one direction must be cut in the same way. Pattern sheet directions for laying out patterns on napped fabrics must be followed carefully.

Choose a simple pattern

A simple pattern is easiest to use because it has few pieces.

Choose pattern size range

Choosing a pattern size that fits without requiring many changes is another way to make a first garment a success.

Patterns are available in proportions suitable to various figure types. There is a decided difference in proportion among patterns that are marked the same size, such as a size 12 designated girls', teen, junior miss, or women's. The differences are in length of waist and skirt as well as in allowance for chest development.

Girls' patterns are for girls of elementary and junior high school age. They

are in even numbers, sizes 6 through 14.

Junior patterns are designed for the teen-age figure, but some adults will also find that these patterns fit them. The patterns usually range in odd numbers from size 9 to 19, but some teen-age patterns are made in even sizes from 10 to 18, while others run, in sequence, 11, 12, 13, 14, 15, 16, and 18.

Misses' patterns are designed for youthful figures, and range from size 10 or 12 to 20.

Misses' and women's patterns are for the mature figure, and range in size from 32 to 50, in even numbers.

Women's half sizes, proportioned for short figures, are available in some makes of patterns.

With all these sizes available, it is possible to buy a pattern that needs little or no change.

Measure for pattern size

The pattern that fits the figure through the shoulders and chest is better because waistline and hip changes are simpler to make.

For dress size, measure:

Bust—Used by pattern companies to determine size.

Chest—Accurate measurement based on bone structure.

Chest plus 2 inches—allows for normal bust development.

If your bust measures 3 or 4 inches larger than chest, substitute measurement of chest or chest plus 2 inches for bust measurement to determine pattern size. For skirt size, measure:

Waist and hip.

Select pattern size nearest hip measure.

Prepare pattern for cutting garment

Upon completing alterations, cut outer margins from printed patterns for accuracy in laying pattern on fabric and in cutting. (See pages 4, 5, 6, and 7.)

Lay the pattern on the fabric

Here are the steps to follow:

1. Straighten both ends of the cloth by tearing or cutting by a drawn thread.

Take firm measurements to determine pattern size.

2. Fold cloth so that the wrong side of the material is on the outside, ready for marking and stitching.

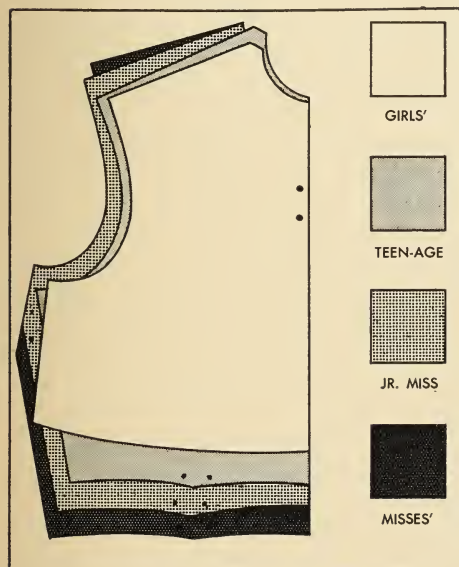
3. Place cloth on the table with the ends and sides forming right angles.

4. Place the pattern on the cloth according to the pattern direction sheet.

5. Use a tapeline or ruler to get the pattern pieces on the grain line of the cloth.

Grain line is the straight threads of the material, both lengthwise and crosswise, that lie at right angles to each other. The straight-of-fabric marking on the pattern usually follows the lengthwise grain line.

When the garment is cut on the straight of the fabric the lengthwise and crosswise grain lines fall in straight lines up and down and around the figure. The garment holds its shape and hangs well.



Each of these patterns is labeled "size 12," but note how they vary according to figure type.

The drawings on the four pages that follow show you how to measure your pattern and how to adjust it to your own figure, thus insuring a finished garment that fits.



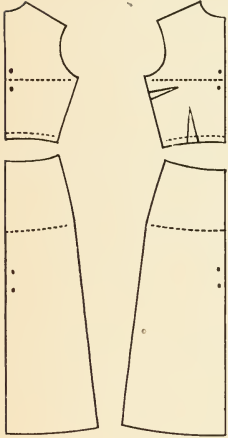
CHECK PATTERN WITH SIMILAR



SHOULDER
SEAM
LENGTH



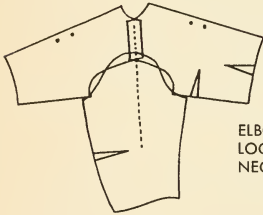
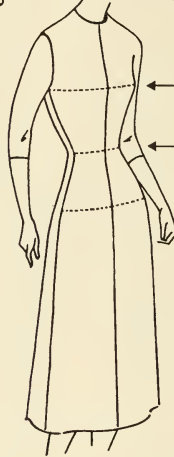
NOTE: IN CHECKING YOUR PATTERN WITH A SIMILAR GARMENT THAT FITS, LAY THE GARMENT FLAT ON A TABLE TO MEASURE. DO NOT MEASURE GARMENT ON A PERSON. THE FIGURES ON THESE PAGES ARE MERELY GUIDES TO SHOW WHAT PLACES TO MEASURE.



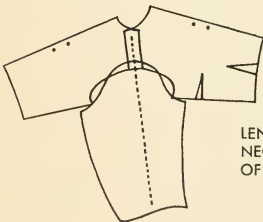
TOTAL WIDTH—FRONT AND BACK
UNDERARM TO UNDERARM

TOTAL WIDTH—FRONT AND BACK
AT WAISTLINE

TOTAL WIDTH—FRONT AND BACK
AT HIPLINE—7" DOWN



ELBOW DART
LOCATION
NECK TO ELBOW



LENGTH OF SLEEVE
NECK TO BOTTOM
OF SLEEVE



GARMENT THAT FITS

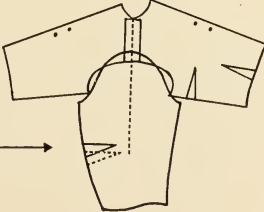
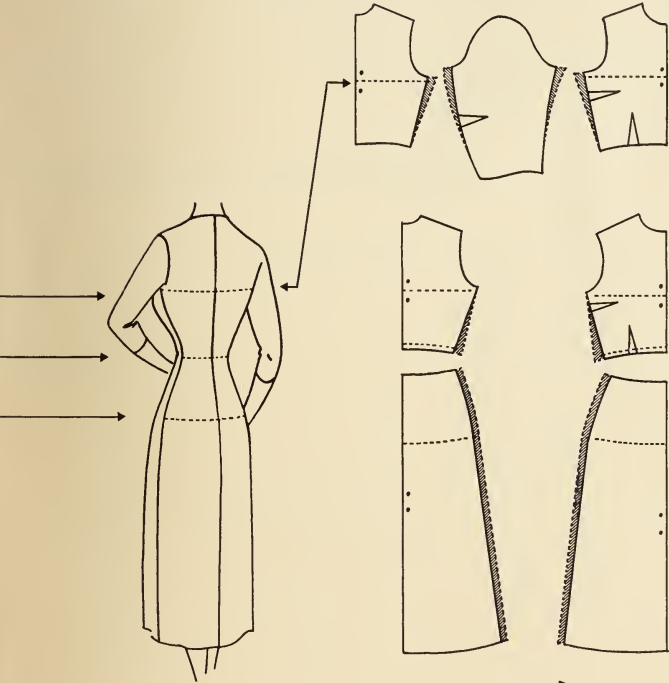
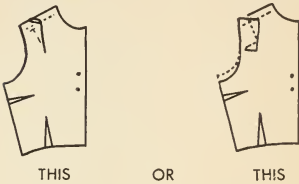
TO MAKE PATTERN LARGER

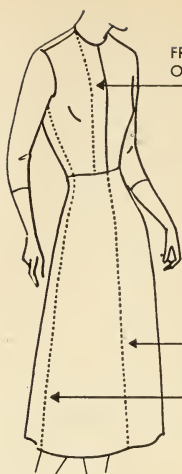
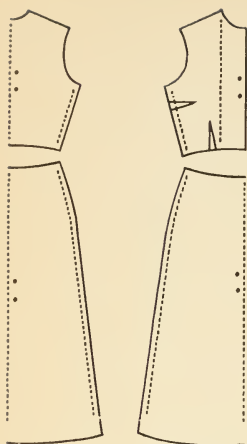
TO LENGTHEN
SLASH AND SPREAD



TO MAKE PATTERN SMALLER

TO SHORTEN
FOLD DART
SLASH, OVERLAP





FRONT WAIST LENGTH—FROM JOINING
OF SHOULDER AND NECKLINES TO WAISTLINE

BACK WAIST LENGTH AT CENTER

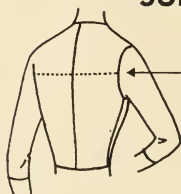
SKIRT LENGTHS:

AT CENTER FRONT

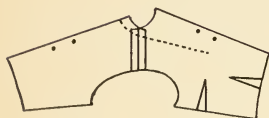
AT CENTER BACK

AT SIDE SEAMS

SUPPLEMENTARY MEASUREMENTS



WIDTH ACROSS BACK
5" FROM NECKLINE



POINT OF UNDERARM DART LOCATION—
TAPELINE AROUND NECK TO BREASTS



WIDTH OF SLEEVE AT UNDERARM

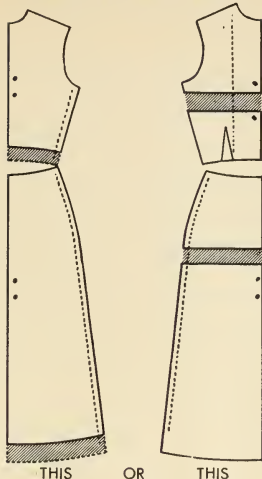


IF SHOULDERS ARE
SLOPING OR SHOULDER
PADS ARE OMITTED,
YOU MAY NEED TO



TO MAKE PATTERN LARGER

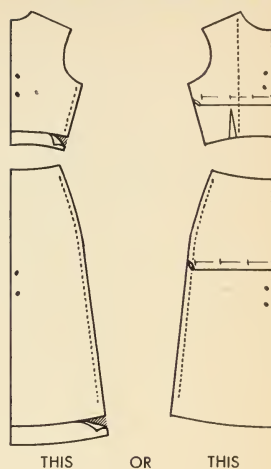
TO MAKE PATTERN SMALLER



THIS

OR

THIS

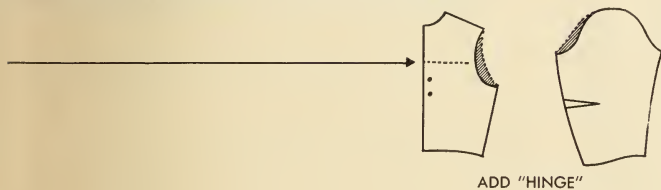


THIS

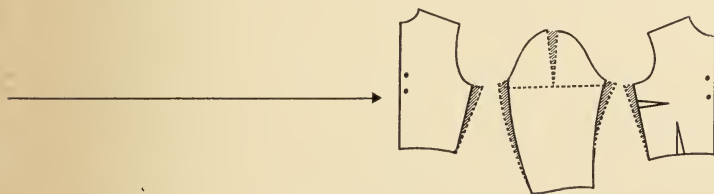
OR

THIS

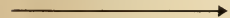
THAT MAY NEED TO BE CHECKED



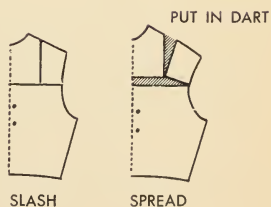
ADD "HINGE"



IF SHOULDERS ARE SQUARE
YOU MAY NEED TO

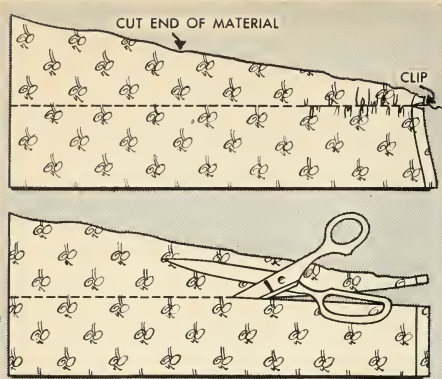


IF SHOULDERS
ARE ROUNDED

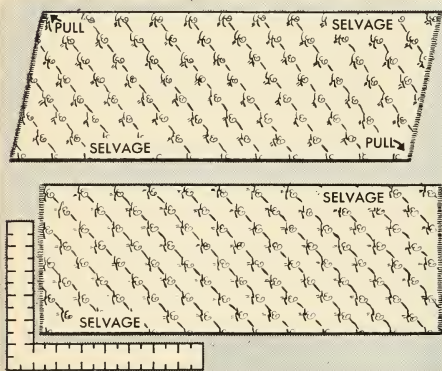


SLASH

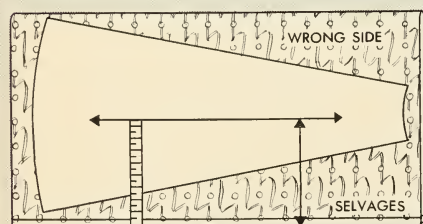
SPREAD



To straighten material, draw a thread and cut on thread line.



Lay the fabric flat on a table so that ends and sides form right angles.



Measure to get straight-of-fabric marking of pattern on grain line of the material.

Cut and mark the garment

As each piece of the garment is cut, mark notches, darts, and sewing lines for quick-method construction.

1. With sharp shears, cut closely around pattern pieces.
2. If there is a center seam in the blouse or skirt, pin the center seam before removing from cutting table.
3. Mark all notches with $\frac{1}{4}$ -inch snips. Do not cut out notches.
4. Mark the seam edges of darts with $\frac{1}{4}$ -inch snips.
5. Mark the center front, center back, and top of sleeve with $\frac{1}{4}$ -inch snips.
6. Mark the sewing lines of darts and locations of pockets and buttonholes.

To mark sewing lines with dressmaker's tracing paper

Dressmaker's tracing paper is made of pigment and wax, and should not be confused with inked carbon paper. This special tracing paper can be used to mark both sides of a garment at the same time.

Always test the tracing paper before using. Mark a line lightly by laying the paper over the wrong side of the fabric. If the mark shows through to the right side of the fabric test to see if the mark can be removed. Wash it out if the fabric is washable. Use a dry cleaning fluid if the fabric is one that should be dry cleaned. If the line is difficult to remove, choose another method of marking.

Use either a tracing wheel or the dull edge of a table knife to mark lines. Follow the edge of a ruler to make sure that lines are straight.

Here is the way to use dressmaker's tracing paper:

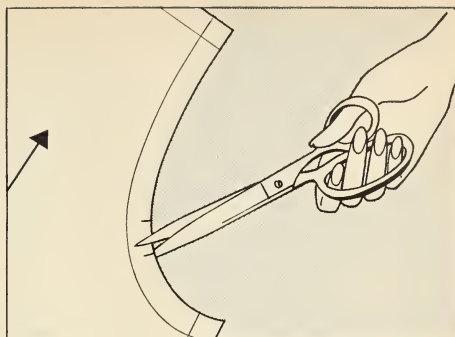
1. Put one sheet, waxed side up, between the lower side of the fabric and a piece of cardboard on cutting table.

2. Remove enough pins so that the paper can be put between the pattern and the cloth.

3. Put another sheet between the pattern and the cloth, waxed side down. Repin the pattern.

4. Place a ruler along the line to be marked and run the tracing wheel or knife along the ruler edge.

5. Mark end point of darts.



Use a single $\frac{1}{4}$ -inch snip to mark all notches.
Do not cut out notch.

To mark sewing lines with double pins and chalk

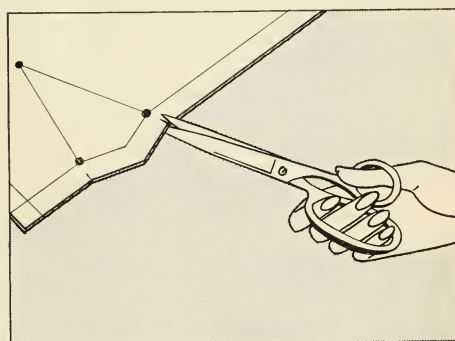
1. Put pins straight through each perforation or along the marking line of a printed pattern.

2. On the under side, put other pins at the places where those from the top show through.

3. When the two sections of the piece are pulled apart, the heads of the pins rest against the fabric.

4. Remove the pattern.

5. Place a ruler along the pin heads, and connect them with a straight chalk line.



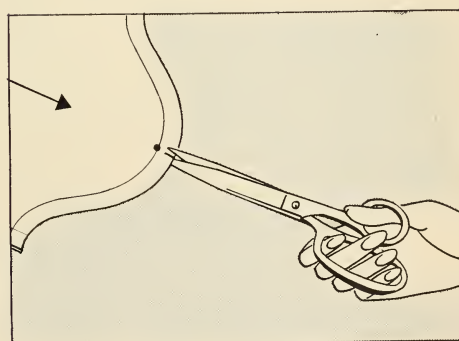
The seam edges of darts should be marked with $\frac{1}{4}$ -inch snips.

Making a garment by the unit method

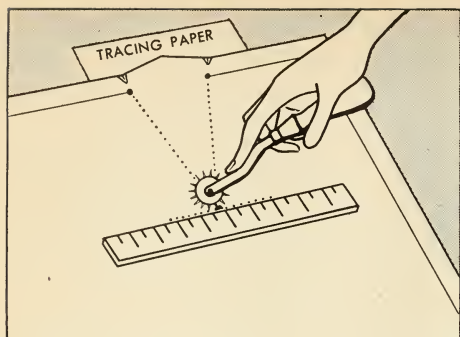
The steps for making a dress are outlined below. If a separate blouse or skirt is to be made, use the parts of the outline that apply.

Stay-stitching is a row of stitching to keep the grain line in place in parts cut across the grain, such as neck, and across the shoulder. Stay-stitch with matching thread on a line slightly less than the seam allowance given on the pattern. Use a seam gauge to be exact.

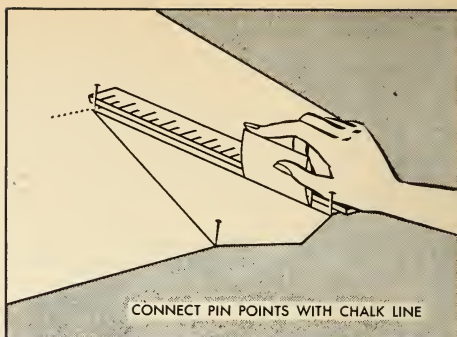
There is a correct direction to follow so that grain line is kept in place while stitching. The general rule is: Stitch from



Mark top of sleeve with $\frac{1}{4}$ -inch snips.



Mark end points of darts.



Use flat edge of chalk for marking.

the highest to the lowest point on sections cut across the grain.

Baste-stitching is basting by machine—6 to 8 stitches to the inch. Use contrasting thread on the bobbin. Stitch on the wrong side.

Following is the outline for making a dress by the unit method:

1. Units of blouse

Front or fronts

Stitch center seam first, if used.

a. Stitch waistline or shoulder darts

and press toward center. Stitch underarm darts and press down.

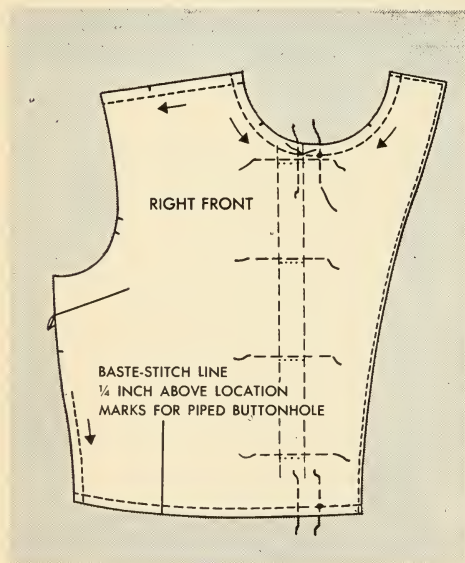
b. Stay-stitch the neck, shoulders, and zipper area, and lower edge.

c. Baste-stitch 2 inches to mark center front, if center seam is not used.

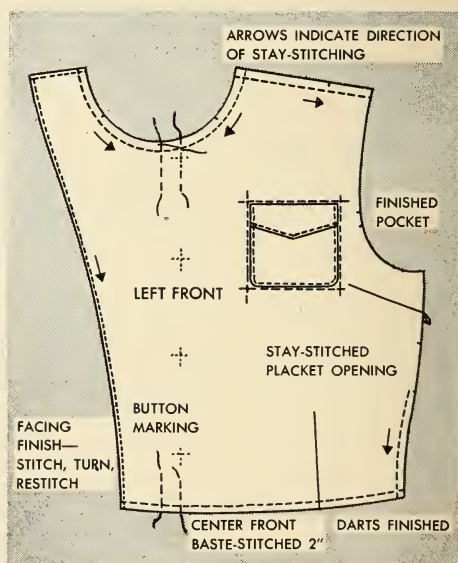
d. Baste-stitch to mark buttonholes and pockets, if used.

e. Make piped buttonholes. If machine buttonholes are to be used, they are finished later.

f. Finish facing edge.



A right front unit ready for making piped buttonholes.



A completed left front unit that is now ready for assembly.

- g.** Attach pockets.

Back of blouse

Stitch center seam first, if used.

- a.** Stitch darts and press toward center.
- b.** Stay-stitch neck, shoulders, waist, and zipper area.
- c.** Baste-stitch 2 inches to mark center back if center seam is not used.

Collar

- a.** Baste-stitch to mark center.
- b.** Pin the two pieces of the collar, easing the top onto the undercollar.
- c.** Stitch on regular seam line.
- d.** Press seam open.
- e.** Trim the seam to remove the bulk. Clip the corners of pointed collars, and cut small wedges from circular collars. Turn and press.

Cuffs

Follow the same general outline as that given above for collar.

Sleeves

- a.** Baste-stitch 2 inches down from snip marking top of sleeve.
- b.** Sew darts or gathers at elbow.
- c.** Gather top of sleeves with machine gathering between notches.
- d.** Sew underarm seam.
- e.** Finish hem or apply cuff.

2. Put together the units of blouse

- a.** Join shoulder seams from neck to shoulder.
- b.** Attach collar to blouse, or finish neckline.
- c.** Sew side seams from armhole to waist.
- d.** Set in sleeves, sewing from sleeve

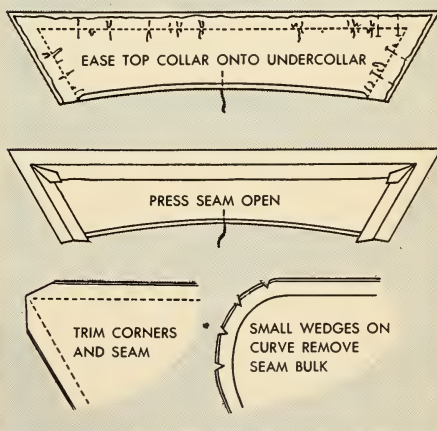


A completed back unit shown from the underside.

side and overlapping stitching at underarm seam.

NOTE: Sleeves may be set into armholes before sewing side seams when making shirts, pajamas, and children's dresses, and house dresses.

To complete a blouse, make machine-made buttonholes or finish piped ones. Finish bottom with a $\frac{1}{4}$ -inch hem, or pink the edge and stitch two rows close to the pinking.



Follow these steps in making a pointed or rounded collar.

3. Units of skirt

Front and back

- a. Sew center seam or baste-stitch 2 inches down from center snip marking.
- b. Make gathers or darts at waist.
- c. Stay-stitch waistline and side seams from hipline to waist.

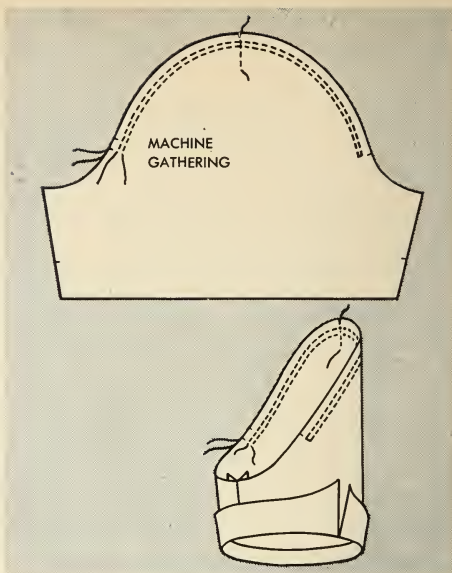
4. Put together the units of skirt

- a. Stitch side seams of skirt from hem to waist.
- b. Stitch back $\frac{1}{2}$ inch when ending seam on left side at placket opening.

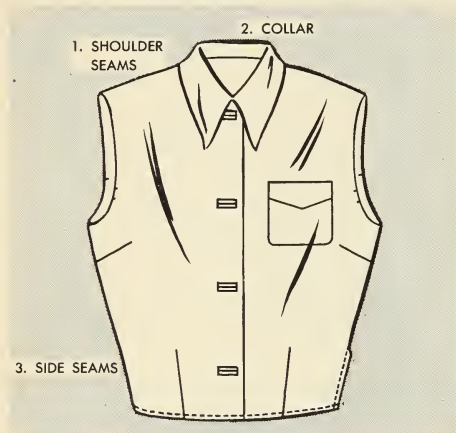
To complete a skirt, finish the placket, attach the band, mark and finish hem.

5. Complete the dress

- a. Join blouse to skirt.

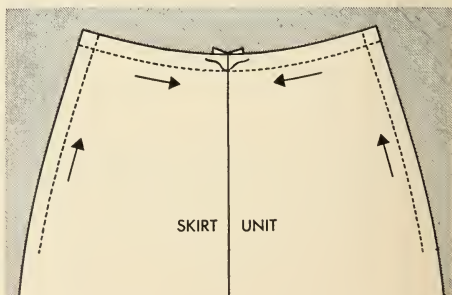


Steps of sleeve unit. Two rows of continuous stitching make better gathering than one.



Collar, pocket, buttonholes, side seams are finished before sleeves are set in. The blouse is ready to attach to skirt at waistline. A completed skirt unit (below) showing staystitching at waistline and side seams between hipline and waist.

- b. Finish placket.
- c. Mark and finish hem.
- d. Make machine-made buttonholes or finish piped ones.
- e. Sew on buttons.
- f. Give final pressing.
- g. Make or buy a belt.



SEWING TECHNIQUES

The quality of the finishes on garments is important. Very noticeable finishes are: necklines, sleeves, hems, plackets, buttonholes, darts, gathers, and seams.

Special techniques are given for plaids, stripes, and certain patterned fabrics.

Necklines

Before finishing the neckline, check to see if it is comfortable and becoming. A

new stayline should be stitched if a correction is made.

A French fold or double bias binding can be used as a neck finish or to attach a ruffle to finish a neckline. The steps are:

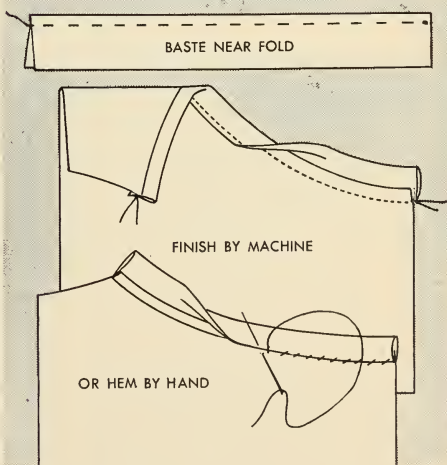
1. Cut a strip of true bias six times the width of the finished fold (about $1\frac{1}{2}$ inches).
2. Fold the bias strip at the center. Press and baste near the fold.
3. Trim the neckline a scant $\frac{1}{4}$ inch above the stayline.
4. Baste the binding to the right side of the neckline, with cut edges together. Stitch $\frac{1}{4}$ inch from cut edges.
5. Turn the folded edge over the cut edges to form a binding. Hem by hand at stitching line.

To finish binding by machine, trim raw edges slightly more. Turn the folded edge beyond stitching line and baste. Stitch on outside in the crease formed by the seam-line.

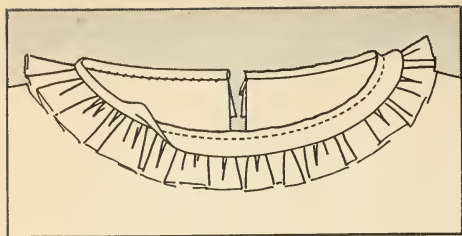
Tips for speedy sewing

The unit method is planned to make sewing go fast. Here are some tips to speed it up even more.

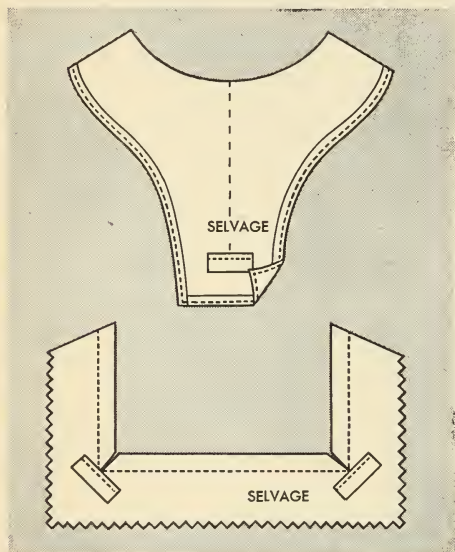
1. Wear a pincushion when cutting, sewing, or pressing.
2. Wear a tape measure around neck or looped through belt.
3. Keep scissors handy when cutting, sewing, or pressing.
4. Pin the pattern to fabric on the straight-of-grain marking, and use weights—such as silverware—to hold the pattern edges in place.
5. Mark all pattern pieces at the time you cut.
6. Know the order of sewing before you start. Plan ahead. Understand your pattern.
7. Pile cut units in sewing order.
8. Do not remove pattern pieces from a unit until you are ready to sew it.
9. Have your sewing tools and place for working conveniently arranged.
10. Use a seam gauge or cellophane tape pasted on bed of machine to help you stitch accurate seams.
11. Use fewer pins and less basting by using hands more for guiding fabric while stitching.
12. Pin-baste straight seams by placing pins back from the stitching line so that the machine needle does not sew over them.
13. Clip seam-end threads as you sew.
14. Press units before putting them together.



Details of the French fold.



Baste-stitch ruffles to neckline before finishing with a French fold.



Neck openings will not tear if reinforced with a narrow strip of selvage.

Ruffles are baste-stitched to the neckline before being finished with a French fold.

An underfacing can be used as a neck finish. The facing is cut on the same grain line as the dress. If your pattern does not include a piece for the facing, you may make one, fitting it to the neckline. A finished facing is 1½ to 3 inches deep.

Reinforced facings keep neck openings from tearing. A narrow strip of selvage is stitched on the facing at the end of opening or at corners before facing is sewed to dress.

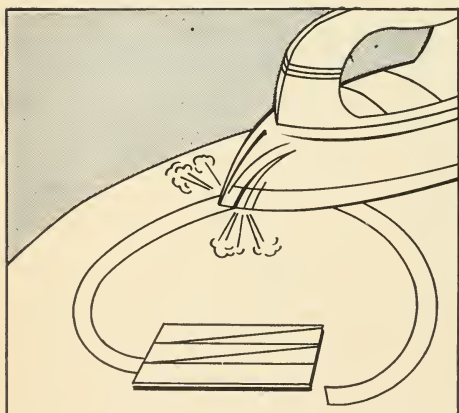
On cottons and some rayons the raw edge of facing is turned under at the stay-line and stitched on the edge.

Seam tape is used for finishing facings for heavy dress fabrics, fine rayons, and silks. If the facing is curved, dampen and press tape in a curve. The tape is stitched flat to cover raw edge of facing.

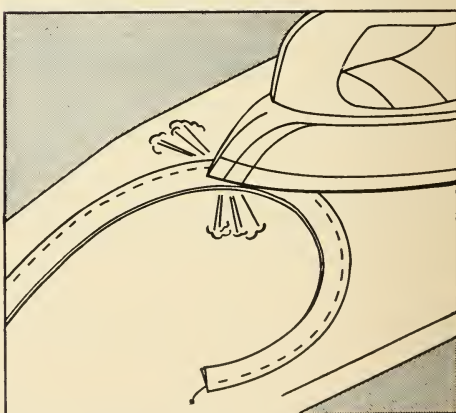
To keep an underfacing flat, press the seam allowances toward the facing side and stitch close to neck seam.

Do not hem facing to dress. Tack at shoulder seams.

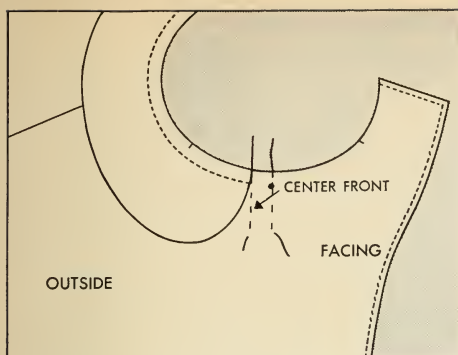
A top facing is a decorative finish. To have a smooth line at the shoulder, rip the seams about 1½ inches from the



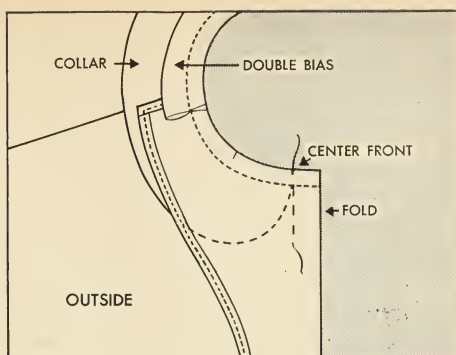
Dampen seam tape and press into a curve if it is to be used to finish a curved facing.



Press folded bias strip into a curve for attaching a collar.



Baste the collar to the neckline, matching notches.



Turn back facing on collar; baste in place. Baste bias across back, cut edges together.

neckline. Snip the seam allowances and reverse the seams. Restitch seams, trim, and press open. Cover with top facing.

Collars should roll evenly or lie flat. The edges should be smooth. The same grain line is used for cutting the top and undercollar. Exception: Undercollars are cut on the bias for coats and suits.

Attaching a collar with double bias:

1. Cut true bias strip like collar, 2 inches wide and long enough to finish back of collar. The bias laps under front facing about $\frac{3}{4}$ inch.

2. Fold bias lengthwise. Baste near fold. Press into curve by stretching folded edge.

3. Baste collar to neckline. Match notches, center front and center back.

4. Turn facing back on collar and baste.

5. Baste bias across the back with cut edges together.

6. Clip neck curve and stitch entire neck edge on seam line.

7. Thumb-press and trim seam.

8. Turn bias to inside. Slip stitch.

The collar can be attached with single bias tape. The method is the same as that used with double bias except that only

one raw edge is sewed in the crease on the seam line.

Attaching a notched collar for a shirt or tailored dress:

1. Pin undercollar to center back and shoulder seams, and baste.

2. Snip collar to seam line at shoulder seam points.

3. Baste collar to neckline from center fronts to shoulder lines.

4. Turn front facing back; match notches, and stitch around neck on seam line leaving top collar free in back between shoulder seams.

5. Turn under seam of top collar and hem at neckline.

6. Tack facings at shoulder seams.

Notched collar on suits and coats:

Use stay-stitching on neckline of the coat and facings. Use stitched V of fine machine stitching at points where collar joins facings and coat fronts.

1. Sew undercollar to coat, right sides together. Match notches.

2. Sew upper collar to facings.

3. Place front facings with attached collar to right side of assembled coat; match notches, lower edges, center back, and collar joinings.

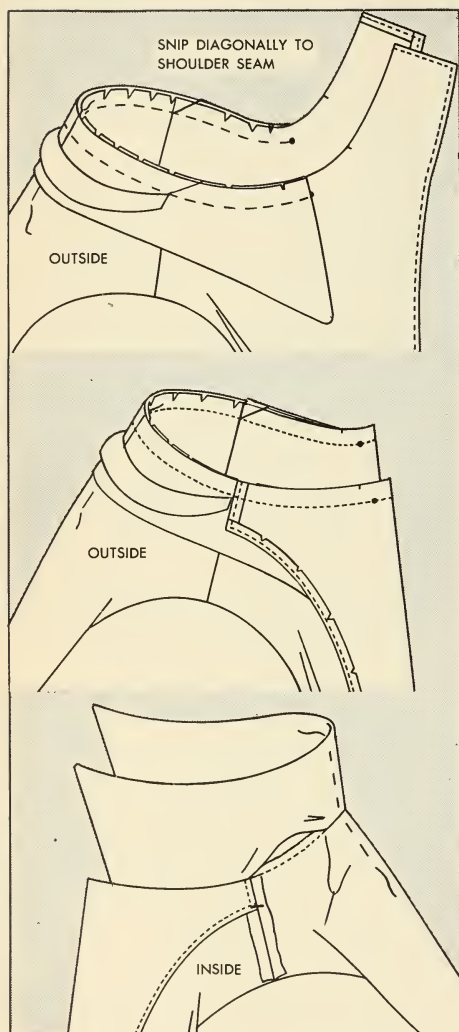
4. For collar roll, draw back top collar from edge of undercollar $\frac{1}{8}$ inch, and pin.

5. Stitch on facing side on seam line.

6. Steam-press the seam open.

7. Trim and grade seam.

8. Turn and press edge of collar.

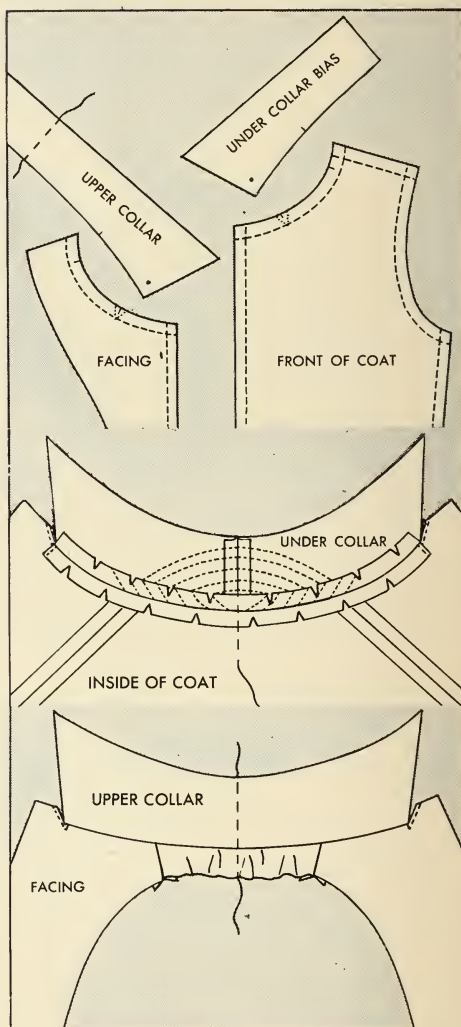


Notched collar on tailored blouse. Top: pin undercollar to center back, shoulder seams; baste. Center: turn front facing back, stitch on seam line; leave top collar free between shoulder seams. Bottom: turn under seam allowance of top collar; hem at neckline.

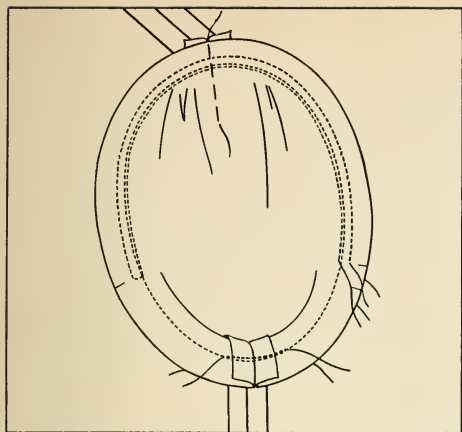
Sleeves

The fabric grain line of a well set-in sleeve falls straight from the shoulder and at right angles around the arm.

Machine gather top of sleeve between notches, using lengthened stitch. Two rows of continuous stitching make better gathering than one. Begin stitching along the seam line and return with second row



Notched collar on suit or coat. Top: Use stitched V of fine machine stitching at points where the collar joins the facings and coat fronts. Center: sew the undercollar to the coat, right sides together. Bottom: sew the upper collar to facings.



Sleeve is stitched into the armhole on the sleeve side.

of stitching about $\frac{1}{8}$ inch above the first row. Draw the gathering threads until sleeve loosely fits armhole. Adjust gathers until grain line runs straight across top of sleeve.

To set the sleeves into the armhole:

1. Match the sleeve notches.
2. Match the $\frac{1}{4}$ -inch snip and 2-inch baste-stitching line at top of sleeve to the shoulder seam.
3. Match sleeve underarm seam to the side seam of blouse.
4. Ease in sleeve fullness evenly.

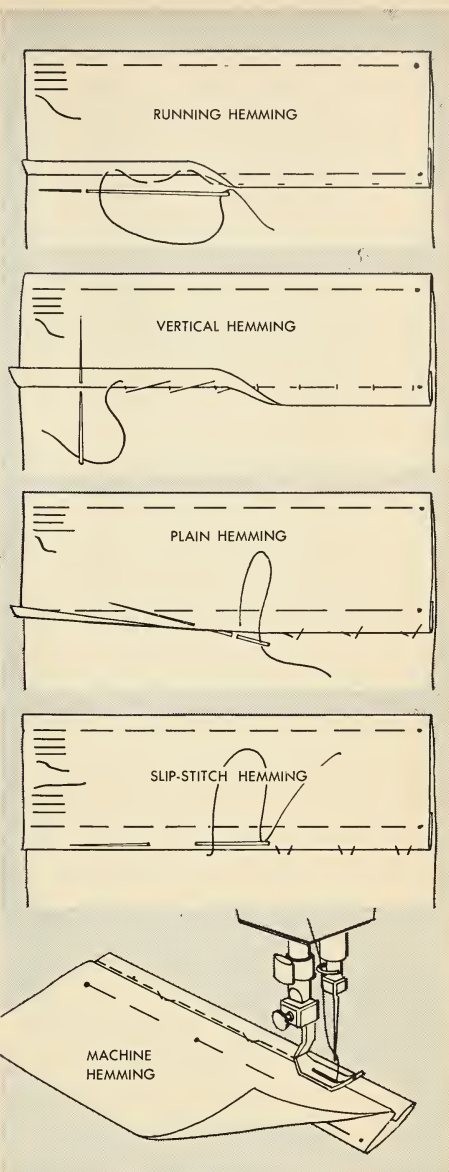
The sleeve is stitched to the armhole on the sleeve side. Start the stitching near the underarm and overlap it 2 or 3 inches. A second row of stitching on the stretched seam allowance about $\frac{1}{8}$ inch from the first stitching makes a sturdy finish. The seams are trimmed evenly and pressed toward the sleeve.

The lower edges of sleeves are finished like neck finishes—French folds, facings, hems, or cuffs.

Cuffs are made and attached like collars. For an easy mock cuff, make a 2-inch hem and turn it back $1\frac{1}{2}$ inches.

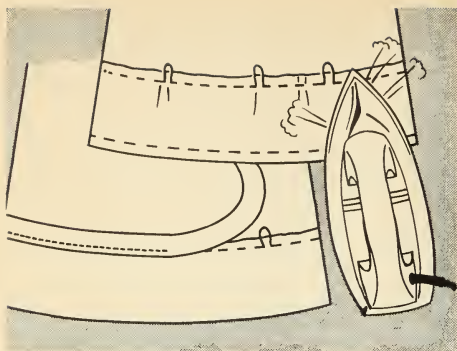
Hems

Hems should have a smooth, straight line around the lower edge. A straight,



Hemming stitches. All edges of hems are basted to the garment $\frac{1}{8}$ inch from the top whether turned under, taped, or pinked. Slip stitching and machine hemming are used on turned edges.

For running and vertical hemming, roll back $\frac{1}{8}$ inch of the hem edge. For machine hemming, turn garment back and stitch on under side of $\frac{1}{8}$ inch turning.



Pull up stitching in small loops, at intervals along hem. Press to ease out fullness. Finish hem with tape.

gathered skirt can have a wide hem. Gored and circular skirts have narrow hems— $\frac{1}{4}$ to 2 inches deep. The more circular the skirt, the narrower the hem.

Trim hem evenly to the desired width. To ease in fullness rather than pleat it, stitch $\frac{3}{8}$ inch from the cut edge. Pull up stitching at intervals only enough to take up fullness and permit hem to lie flat. Finish hem with tape or fold under on the stitched line.

The hems on fine rayons, wool, and heavy fabrics are finished with seam tape. The tape makes a smoother finish if pressed in a curved line. The tape is sewed on the stitched line. Heavy cottons can

be finished in the same way with bias tape.

Hand hemming stitches should be small, inconspicuous, slightly loose, and spaced about $\frac{1}{2}$ inch apart. Start and end hemming about every 12 inches, or at each seam in a gored skirt. Start and end securely with several small stitches taken on the hem fold underneath.

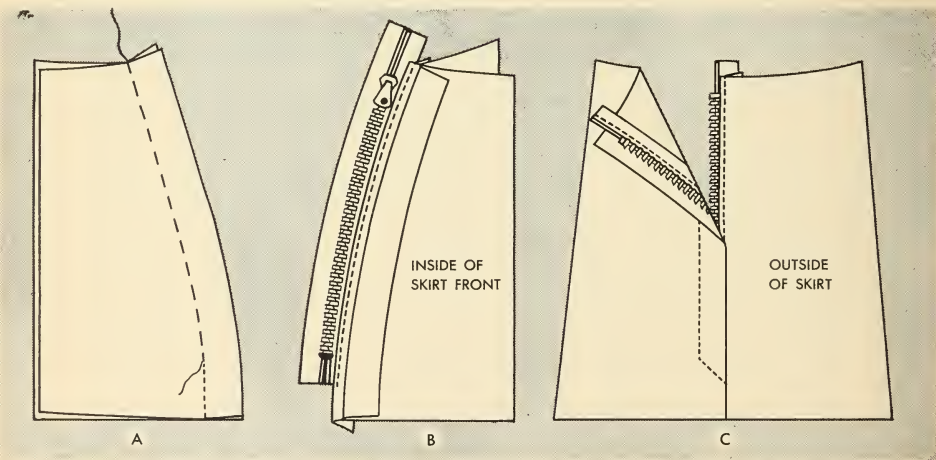
Plackets

Skirt and dress zipper plackets should be smooth, and the zipper concealed. Here are the steps:

1. Baste-stitch placket opening on seam line.
2. Press seam open.
3. Press and baste $\frac{1}{8}$ -inch fold from seam line on back seam allowance.
4. Lay the $\frac{1}{8}$ -inch fold on the outside of the zipper close to the teeth. Baste and stitch.
5. Stitch on right side after basting zipper flat across side seam.
6. Remove the baste-stitching which held placket together.

Piped buttonholes

1. Baste-stitch two lines to indicate buttonhole length.

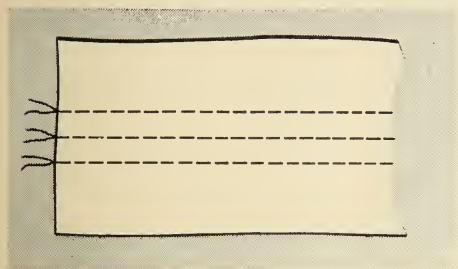


A. Baste-stitch placket opening on seam line. B. Press $\frac{1}{8}$ -inch fold from seam line on back seam allowance, baste and stitch to zipper close to teeth. C. Stitch on right side after basting zipper flat across the side seam. Remove baste-stitching.

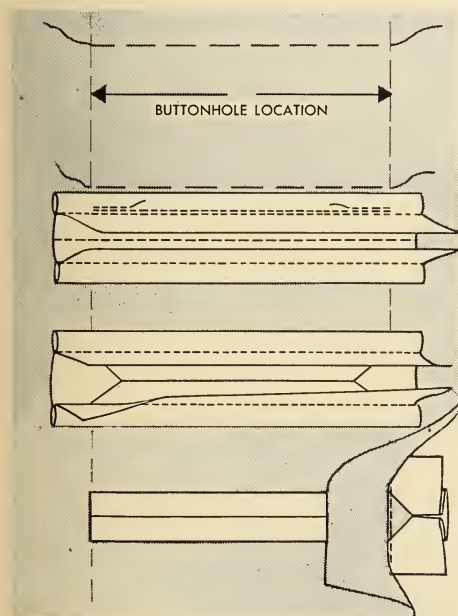
Baste-stitch lines $\frac{1}{4}$ inch above the buttonhole location marks.

2. Count the number of buttonholes; measure their total length. Example: 6 buttonholes, each 1 inch long, measure 6 inches.

3. Cut a lengthwise strip twice as long as total length of buttonholes, and 2 inches wide.



Baste-stitched lines for accurate folding and stitching of buttonhole strip.



Two vertical lines of baste-stitching indicate buttonhole length.

Baste-stitched line $\frac{1}{4}$ inch above buttonhole location shows line for top of tucked strip.

Buttonhole stitching directly on tuck stitching.

Buttonhole cut through center $\frac{3}{8}$ inch from each end and diagonally to the corners.

Ends of buttonhole piping secured by stitching across triangle.

4. Baste-stitch center of long strip. Baste-stitch two more lines $\frac{1}{4}$ -inch from center on each side.

5. Fold this long strip $\frac{3}{4}$ inch and stitch a $\frac{1}{8}$ -inch tuck from fold. Repeat on other edge. You will have two $\frac{1}{8}$ -inch tucks $\frac{1}{4}$ inch apart.

6. Cut tucked strip into sections twice the length of the buttonhole.

7. Pin fold of tuck on baste-stitch line of buttonhole, right sides together.

8. Stitch marked length of buttonhole on original tuck stitching, and secure each end by sewing back a few stitches. Repeat on other tuck.

9. Cut between parallel lines of stitching to $\frac{3}{8}$ inch from each end. Clip diagonally to each corner.

10. Pull ends of strip to inside, forming square corners at the ends.

11. Stitch across triangle on the inside at the end of buttonhole.

To finish later:

Stab pins through facing at each end of buttonhole opening. The two pins should follow a grain line. Slit the facing between the pins. Turn raw edges under and hem.

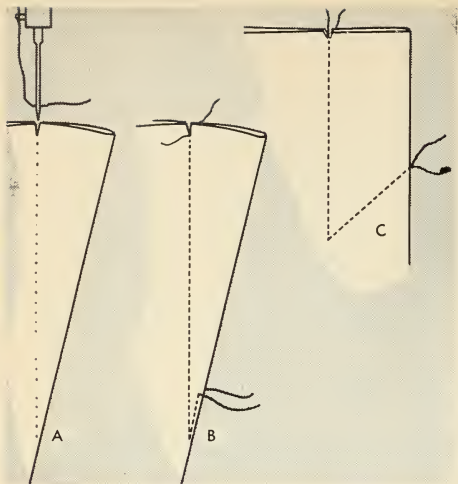
Darts

Darts should be smooth, even, and well placed. When beginning and ending darts, as pictured, there is no necessity to tie threads.

For fine dressmaking, end darts by fastening each machine thread to folded edge of dart, using a hand needle.

Pressing darts. Dress and skirt darts are pressed toward the center, front and back. Underarm and sleeve darts are pressed down.

Trimming darts. Large darts in suits and coats may be trimmed to seam width and pressed open. The tip of the dart can be pressed in a tiny box pleat, or split and pressed open.

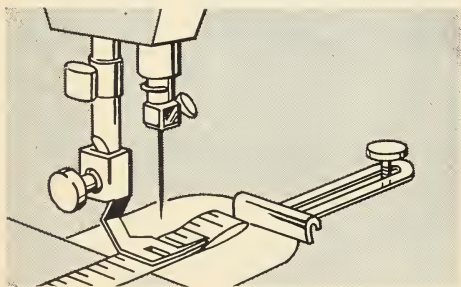


A. Start stitching in $\frac{1}{4}$ -inch snip marking outside edge of dart. B. Stitch back $\frac{1}{2}$ inch on folded edge at point of dart. C. End darts not tapered to a point, by stitching diagonally to fold.

Coat lining darts are never trimmed nor stitched by machine. They are pressed and tacked by catch stitches.

Machine gathering

For gathering, adjust sewing machine, 8 to 10 stitches to the inch. Two rows of continuous stitching make better gathering than one. Begin stitching along the seam line, and return with second row of stitching about $\frac{1}{8}$ inch above the first row. Draw the gathering tight by pulling the underthreads. Press gathers between the fingers. Loosen gathers to fit. The gathers can be locked at the end by pulling the upper and lower threads.



Use tape measure in setting seam guide to the desired width.

Seams

Plain seams are satisfactory for most garments. For accurate seams, match ends of seams and notches.

Use a seam guide to help you stitch even seams. Use the tape measure in setting the guide for stitching a seam. Crease a tape measure on an inch line, place it under the presser foot, and drop the machine needle on the seam allowance line. The presser foot holds the tape measure in place until the guide is set and fastened securely. If a strip of cellophane tape is being used as a guide, paste it on the bed of the sewing machine.

To join bias and straight edges in a seam, stitch with the bias side up.

To ease one edge of a seam to the other, stitch the seam with the eased side up.

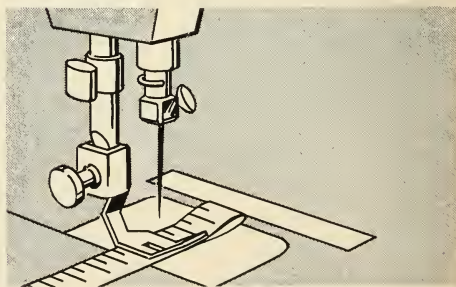
To join a gathered edge and a straight or bias edge, stitch exactly on the gathering line with the gathered side up.

To join an inside curved edge to a straight edge, or to join two curved edges, slash the seam edges almost to the stay-stitching. Then stitch as a straight seam.

Extra finishing is needed on some seams to keep them from raveling. The fabric thickness, firmness of weave, and degree of raveling will influence the choice of finish.

Seam finishes:

1. Overcasting by hand or zigzag attachment.
2. One or 2 rows of small machine stitching.



A strip of cellophane tape may be used instead of a seam guide.

3. Stitching and pinking.
4. Edges turned under and stitched.
5. Seam binding applied flat.

Pinking is of little value for clothes that are washed often, but may be useful for clothes that will be dry cleaned.

The seams of unlined jackets are often finished with edges turned under and stitched, or with seam binding applied flat to cover raw edges.

Fell seams can be used for play shorts or slacks, pajamas, and shirts. Two rows of stitching $\frac{1}{4}$ inch apart show on the outside of the garment; the inside is smooth. Side seams are usually plain seams on shorts and slacks. Do not make a fell seam where a zipper is used.

The Red Cross method is a simple way to make a good fell seam:

- a. Place the wrong sides together.
- b. Trim half the seam allowance on one side of the seam.
- c. Crease $\frac{1}{4}$ -inch fold on the other side.
- d. Slip trimmed side into fold.
- e. Pin and baste if necessary.
- f. Stitch on the outside $\frac{1}{4}$ inch from folded edge.
- g. Lay open seam flat against garment and stitch close to folded edge.

NOTE: All stitching is on the outside.

French seams can be used for underwear, sleeping garments, and certain clothes made of transparent fabrics. French seams are rarely used for dresses.

- a. Baste and stitch seams on right side of garment $\frac{1}{8}$ to $\frac{1}{4}$ inch narrower than seam allowance.
- b. Trim to $\frac{1}{8}$ inch or slightly less.
- c. Press seam open; turn garment to wrong side and crease along seam. Baste on creased edge.
- d. Stitch the seam on inside deep enough to include all trimmed edges.

Lapped seams can be used for shaped yokes.

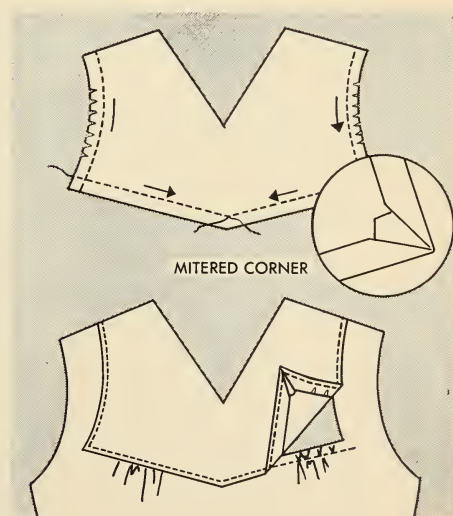
- a. Stay-stitch slightly less than seam allowance around raw edges of yoke.
- b. Turn on seamline and press.
- c. Miter corners or clip curves.
- d. Match and pin the turned edge of the yoke to the other part of the seam.
- e. Stitch near the folded edge.

Woven plaids

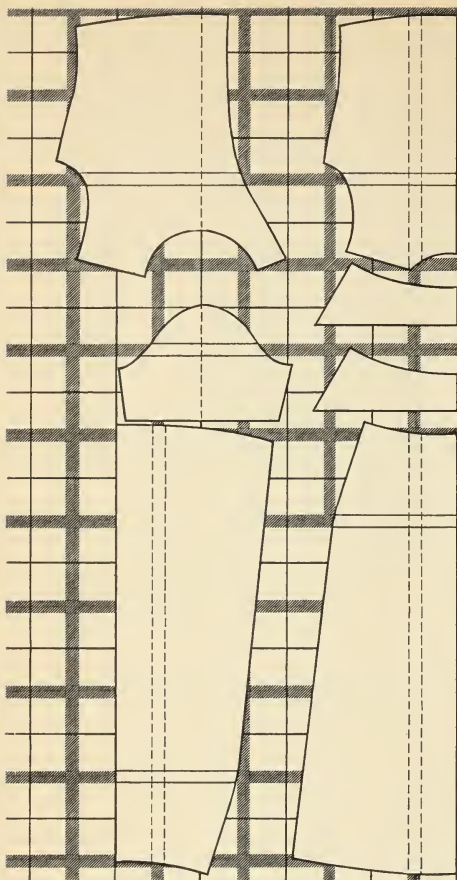
Plaids take time to cut and sew. Garments made of plaid require more yardage than those made of plain fabric. Sewing must be done carefully or the matched plaid will slip out of line.

To be attractive, the plaid should be centered front and back. The collar and belt are centered, and match the blouse and skirt. The plaids match on the front, back, and side seams. The sleeves match the bodice.

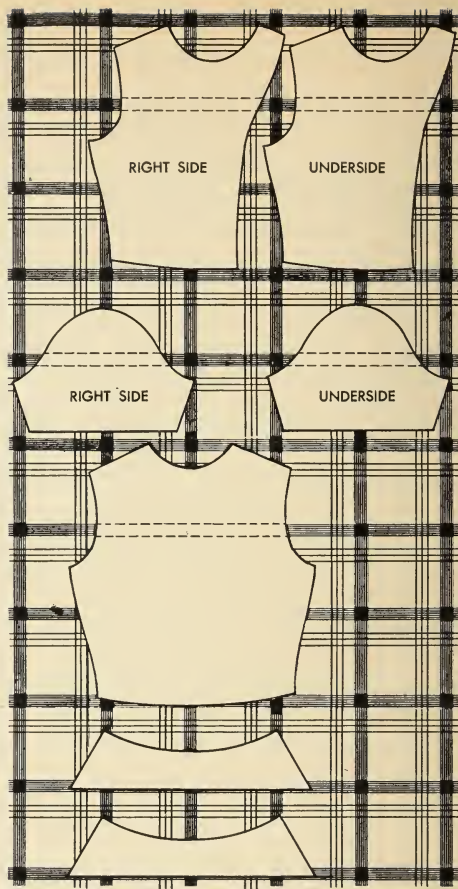
You can buy plaids that are either balanced or unbalanced in design. Plaids that are balanced have no up and down nor left and right. Unbalanced plaids have an up and down and a left and right.



Lapped seams and mitered corners used on a shaped yoke.



Layout for a balanced, woven plaid dress. Plaid matches at hipline, center front, center back, and notches at armhole and bodice.



Pattern layout for unbalanced, woven plaid blouse. Plaid reversed in one front and one sleeve will balance the design.

Unbalanced plaids are more difficult to cut and match than balanced plaids.

Avoid printed plaids that do not follow grain line.

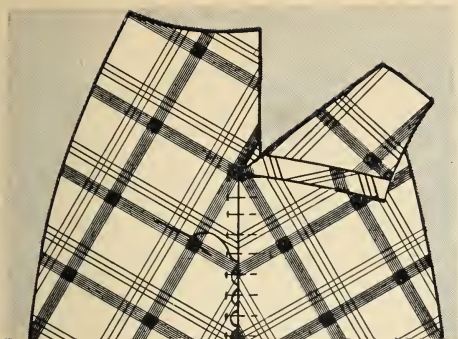
Match the design from the right side and top baste.

Steps in top basting are:

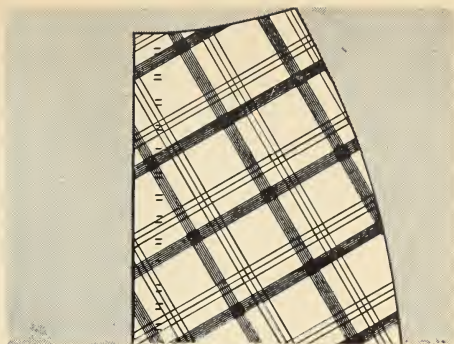
- a.** Lap folded seam allowance of one side over the opposite side. Match and pin the same color stripes.
- b.** Top baste with long and short stitches directly on the fold.
- c.** Leave 2 inches extra thread at the end and make a knot.
- d.** Loosen bastings slightly. Turn to wrong side. Stitch in the crease indicated by the basting.



Finished blouse of unbalanced plaid.



Top basting for matching plaids.



Skirt now top basted, ready for stitching.

Stripes

The center front and center back should be placed on a stripe or between stripes. Matching stripes are then top basted.

Patterned fabrics

Some designs with printed or woven motifs should be centered or balanced on the blouse and skirt. Use top basting to match the motifs.

TIPS ON HANDLING FABRICS

Fabrics made from natural fibers

Cotton, flax, silk, and wool are natural fibers that have been used throughout the ages.

Cotton fabric finishes

Certain finishes used on cottons change the physical properties of the material. For this reason, the normal ironing temperature may need to be lowered. Also, bleaches normally used on cottons may yellow them because of the finish used.

Linen fabrics

Linen (made of flax) should be handled in a manner similar to that used for cotton in cutting, pressing, and sewing. Some linen fabrics, due to their weaves, tend to ravel more than most cottons. Extra seam finishes may be desirable. Dress linen is usually treated for crush resistance and shrinkage.

Silk fabrics

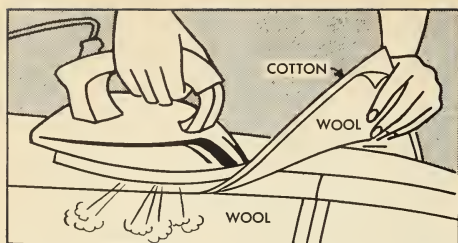
Follow the same precautions when sewing and pressing silk as for fabrics of man-made fibers (page 26).

Wool fabrics

Medium-weight woolens, such as flannel, tweed, and fleece, are easy to tailor because they take the shape of the garment readily. Woolen materials that have a soft, lightly napped surface do not show seam lines when pressed. A beginner in tailoring should avoid firm, smooth worsteds, such as men's suitings and gabardines, because they are difficult to shape and press.

Shrinking wool. Wool fabric should be shrunk before being cut and made into a garment. Even if the fabric is labeled preshrunk, home shrinking is necessary.

- a. Dip a sheet into warm water and wring dry.



Use a cotton and a wool pressing cloth for woollens.

- b. Lay folded wool on sheet.
- c. Fold edges of sheet over cloth. Fold over and over lightly the entire length.
- d. Cover with paper or turkish towel for two hours.
- e. Remove material from sheet and lay it on flat surface. (Oilcloth will protect table or floor.)
- f. Smooth material so that it will dry straight with the grain, the ends and sides forming right angles.

When this method is used, the wool will not need pressing before cutting. The first pressing comes after the units are made.

Pressing wool. Wool must be pressed with steam. A wool pressing cloth should be used to protect the wool. If a regular iron is used, place a wool pressing cloth next to the wool and cover it with a dampened cotton cloth to get steam.

Use plenty of steam, and press lightly with the grain line. Never bear down with the iron. Never iron back and forth. Never press wool until it is completely dry; allow it to dry naturally.

Press on wood or a firm ironing board for well creased edges and to avoid seam marks. Another precaution to avoid press marks is to brush the right side of the wool while steaming.

Shape curved parts of the garment, such as shoulder, top of sleeves, and bust, over a pressing ham or pad.

To crease hems and edges, beat with wooden clapper while fabric contains steam.

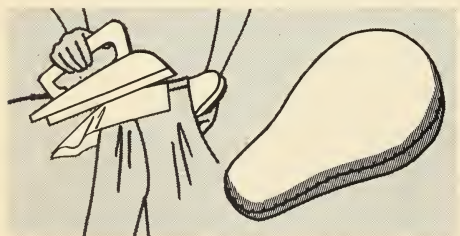
Fabrics of man-made fibers

Some of the man-made fibers are: rayon, acetate, nylon, vicara, orlon, acrilan, dacron, dynel, saran, and the yet unnamed X51.

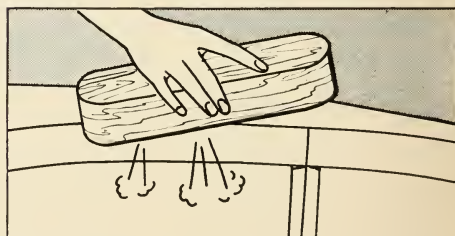
Not all of these man-made fibers are commonly found on the fabric market. Some will prove as useful as rayon, acetate, and nylon as soon as they come into sufficient production.

Many of the man-made fibers are blended in fabrics with other fibers, man-made as well as natural. *However, the fiber content is but one of the important factors affecting the wearing qualities and usefulness of a fabric. Yarn construction, weave, blend, and amount of different fibers affect the durability.* Also, the performance of any fabric depends on its correct use. For example, certain fiber types do not absorb water; these might well be used in rainwear. Others cannot be ironed satisfactorily and therefore are ideal in knitted wear that requires no ironing.

Because of the different physical properties of fibers, manufacturers should



A pressing ham is an aid in shaping curved parts of garment.



Beat with wooden clapper while fabric contains steam.

give information on care of fabric. If a label gives directions for care, keep it for reference.

Properties of some man-made fibers

In the following lists, plus signs (+) indicate the fibers' good qualities; minus signs (-) show the less desirable characteristics.

- Rayon**
- + Has many properties of cotton
 - + Can be made to look like any of the natural fibers
 - + Takes color well
 - + Washable
 - + Inexpensive
 - Loses about half of strength when wet, but regains it on drying
 - Will shrink unless treated

- Acetate**
- + Fast drying
 - + Resistant to shrinking and mildew
 - + Can be heat set for permanent pleating and permanent moiré
 - + Drapes well
 - Must be pressed lightly with cool iron and special care to keep it from becoming shiny
 - Dissolves with nail polish or remover containing acetone
 - Subject to gas fading unless treated
 - Requires special dyes

- Nylon**
- + Strong and resilient
 - + Quick drying
 - + Will not shrink
 - + Easily cleaned
 - + Resists mildew and insects
 - + Strong when wet
 - Must be ironed with low heat or fabric will fuse
 - Uncomfortable to wear in hot weather because it is non-absorbent
 - Tends to pucker in sewing

- Vicara**
- + Wool-like — warm to touch, absorbent, resilient
 - + Blends well with all fibers, especially wool and nylon in knit and pile fabrics
 - Must be blended with other fibers for strength
 - Tends to mat when wet
 - Weak when wet

- Orlon**
- + Very strong
 - + Low shrinkage
 - + Excellent resistance to sun and weather
 - + Resistant to mildew and insects
 - + Can be heat-set for permanent shape
 - + Can be blended with wool or rayon for suitings
 - Must be pressed at low to medium temperature to avoid yellowing
 - High sheen may be objectionable in some articles
 - Poor absorption

- Acrilan**
- + Very strong
 - + Quick drying
 - + Wrinkle-resistant
 - + Resistant to moth and mildew
 - + Wool-like — warm to touch, has bulk without weight
 - + Can be blended with wool or rayon and other fibers for suitings
 - Must be pressed at low to medium temperatures to avoid yellowing
 - Poor absorption

- Dacron**
- + Tough, resilient
 - + Quick drying
 - + Wrinkle-resistant
 - + Retains shape when wet
 - + Can be heat-set to make permanent creases or pleats and to prevent shrinkage
 - + In blends, makes good wrinkle-resistant suitings
 - Must be ironed at low temperatures or shape may be distorted

Dacron (Continued)

- Cannot be dyed easily
- Poor absorption

Dynel

- + Wool-like, warm to touch, and resilient
- + Quick drying
- + Shrink-resistant
- + Resistant to mildew, insects, chemical action, flame (excellent for protective clothing)
- + Can take permanent pleats and does not muss easily even when wet
- Most heat-sensitive of all synthetic fibers
- Will become "boardy" if washed or ironed at high temperatures
- Cannot be dyed easily
- Tends to shed in usage
- Poor absorption

Precautions when pressing fabrics of man-made fibers

1. Test fabric for correct iron temperature by touching iron to a seam. Test fabric before using steam because excessive moisture crinkles some fibers.

2. Use a cool iron on most fabrics of man-made fibers.

3. Press on the wrong side whenever possible.

4. Use a pressing cloth when pressing on right side.

5. Press lightly.

6. Press *with* grain line.

7. Use firm ironing surface, not a softly padded one, to avoid seam marks.

8. Press seams open over a rolled magazine or a half round of wood.

9. Use strips of paper under seams or darts to avoid press marks on right side.

Acetate should be pressed with a cool iron. Very little pressure is needed. When using steam, press to smooth—not to dry.

Rayon can be pressed with a somewhat warmer iron than that used for acetate. If the rayon fabric is a crepey weave or one that will stretch, press carefully to retain the shape of the garment.

Nylon, dacron, and orlon garments require only a touching up of seams, hems, and edges with a cool iron.

Precautions when sewing

Sewing on the fabrics of newer man-made fibers is in the experimental stages.

There are a few precautions to take.

Cover the cutting table either with oilcloth wrong side up, or with a tightly stretched sheet. Cloth will then cling and stay in place during cutting. This will help you cut many fabrics that tend to slip or slide readily.

Stay-stitch the units of a garment to prevent stretching the fabric while making.

Pin every long seam while the fabric is on the cutting table. This avoids stretching the cloth in one place and easing it in another.

Handle the fabric as little as possible during the construction of a garment. Keep it wrinkle-free on hanger or lying flat.

Thread to use

Mercerized cotton thread can be used for most sewing. For especially sturdy sewing, use heavy-duty thread. Cotton thread can be used on all fabrics of natural or man-made fibers and blends.

Silk thread is strong and is sometimes used on wool. However, it is glossy for outside stitching on wool.

Threads of man-made fibers may be used for sewing fabrics made of those fibers. These threads are in the experimental stage, and colors are limited. The pressing temperature must be lowered when pressing a garment stitched with these threads.

Nylon thread often untwists and makes threading a needle and hand sewing difficult. Seams stitched with nylon thread

have a tendency to pucker because of the fiber's elasticity.

Test the machine stitching on the cloth before you start. The upper tension may need to be loosened.

A fine machine needle may be needed when stitching with nylon thread. A smaller needle hole on the face plate of

your sewing machine may be desirable.

A new needle hole may be made by pasting cellophane tape over the needle hole of the sewing machine and puncturing the tape with the fine needle.

A smaller needle hole allows less "play" in the thread; thus, less puckering results.

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